O

```
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                          Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Run
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OM nucleic - nucleic search, using sw model
                                                                      a
                                                                                                                                                                                                                      No
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    on:
         2 W 4 D 0 L 8 0
                                                                                                                                                                                                                                                                                                                          Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
    693
668.4
611.4
609.4
609.4
593.4
593.4
                                                                                                                                                                                                                      Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          seq length:
seq length:
                                                                                                                                                                                                                                                                                                                                                                                                    N_Geneseq_032802:*

1: /SIDS1/gcgdata/geneseq/geneseqn-embl_/NA1980.DAT:*

2: /SIDS1/gcgdata/geneseq/geneseqn-embl_/NA1981.DAT:*

3: /SIDS1/gcgdata/geneseq/geneseqn-embl_/NA1982.DAT:*

4: /SIDS1/gcgdata/geneseq/geneseqn-embl_/NA1983.DAT:*

5: /SIDS1/gcgdata/geneseq/geneseqn-embl_/NA1983.DAT:*

6: /SIDS1/gcgdata/geneseq/geneseqn-embl_/NA1986.DAT:*

7: /SIDS1/gcgdata/geneseq/geneseqn-embl_/NA1986.DAT:*

9: /SIDS1/gcgdata/geneseq/geneseqn-embl_/NA1989.DAT:*

9: /SIDS1/gcgdata/geneseq/geneseqn-embl_/NA1999.DAT:*

10: /SIDS1/gcgdata/geneseq/geneseqn-embl_/NA1999.DAT:*

11: /SIDS1/gcgdata/geneseq/geneseqn-embl_/NA1991.DAT:*

12: /SIDS1/gcgdata/geneseq/geneseqn-embl_/NA1991.DAT:*

13: /SIDS1/gcgdata/geneseq/geneseqn-embl_/NA1991.DAT:*

14: /SIDS1/gcgdata/geneseq/geneseqn-embl_/NA1991.DAT:*

15: /SIDS1/gcgdata/geneseq/geneseqn-embl_/NA1995.DAT:*

16: /SIDS1/gcgdata/geneseq/geneseqn-embl_/NA1995.DAT:*

17: /SIDS1/gcgdata/geneseq/geneseqn-embl_/NA1995.DAT:*

18: /SIDS1/gcgdata/geneseq/geneseqn-embl_/NA1999.DAT:*

19: /SIDS1/gcgdata/geneseq/geneseqn-embl_/NA1999.DAT:*

20: /SIDS1/gcgdata/geneseq/geneseqn-embl_/NA1999.DAT:*

21: /SIDS1/gcgdata/geneseq/geneseqn-embl_/NA1999.DAT:*

22: /SIDS1/gcgdata/geneseq/geneseqn-embl_/NA1999.DAT:*

23: /SIDS1/gcgdata/geneseq/geneseqn-embl_/NA20001.DAT:*

23: /SIDS1/gcgdata/geneseq/geneseqn-embl_/NA2001A.DAT:*

24: /SIDS1/gcgdata/geneseq/geneseqn-embl_/NA2001B.DAT:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        length: 0
length: 2000000000
                                                                                                                                                                                                                    Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              October 26, 2002, 20:33:06 ; Search time 244 Seconds (without alignments) 4876.318 Million cell updates/sec
    100.0
98.8
96.5
88.2
87.9
85.6
85.6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-840-795-18_COPY_78_770
693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1736436 seqs, 858457221 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             atggattgccaagaaaatga.....agcagcaggggcctgaaatg 693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GenCore version 5.1.3
Copyright (c) 1993 - 2002 Compugen
                                                                                                                                                                                                                      Length DB
    3861
3152
1162
899
899
905
905
                                                                                                                                                                                                                      IJ
                        AAZ92411
AAF27998
AAF28049
AAS05944
AAC63993
AAC63994
AAC62232
AAC58642
                                                                                                                                                                                                                                                                                   SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3472872
Human uterine myom Human TNFR homolog Human TNFR homolog cDNA encoding a hu Human PRO5727 prot
                                                                                                                                                                                                                  Description
                                                                                                                                   Human
                                                                                                                                                                         cDNA encoding huma
                                                                                                                              TR14 recepto
TR14 coding
```

5 154.8 22.3 2870 21 AAC58639	.8 22.3 2185 20 AAX24978	154.8 22.3 1704 19 AAV33361	154.8 22.3 1660 22 AAS08983	154.8 22.3 1502 20 AAX08689	154.8 22.3 1496 19 AAV33362	154.8 22.3 1325 22 AAS08984	154.8 22.3 1254 22 AAF90463	154.8 22.3 987 20 AAX59346	156.4 22.6 1489 20 AAX23415	156.4 22.6 1272 21 AAA90148	163.2 23.5 4089 21 AAA90147	163.2 23.5 1914 22 AAS08985	163.2 23.5 1678 20 AAX23413	163.2 23.5 981 20 AAX87394	163.2 23.5 942 20 AAX24977	163.2 23.5 886 20 AAX23414	163.2 23.5 645 21 AAA90154	188 27.1 292 22 AAC63995	188 27.1 292 21 AAC62225	220.4 31.8 529 22 AAS05962	229.6 33.1 474 22 AAF28013	229.6 33.1 474 21 AAZ92409	2 35.8 546 22 AAF28012	248.2 35.8 546 21 AAZ92410	257 37.1 528 22 AAS05964	315.4 45.5 519 22 AAS05966	317.4 45.8 801 22 AAS05961	393.2 56.7 1200 22 AAS05955	393.2 56.7 534 22 AAS05954	413.2 59.6 1081 22 AAS05973	427.4 61.7 3385 21 AAA47454	446.4 64.4 807 22 AAS05945	446.6 64.4 891 22 AAS05960	
Human PRO4333 prot		Nucleotide sequenc	Human TRADE-alpha	Novel nucleotide s	Nucleotide sequenc	Human TRADE-beta c	Human tumour necro	Human NTR-5 cDNA.	Human hAPO4-alpha	Human Troy gene.	Murine Troy gene.	Murine TRADE cDNA.	Mouse mAPO4-alpha	Mouse STRIFE1 (Tan	Mouse TRAIN-R (lon	Mouse mAPO4-alpha	0	Human TNFR homolog	Nucleotide sequenc		Human TR14 coding	cDNA encoding huma	Human TR14 coding	cDNA encoding huma	Polynucleotide seq	DNA s	Degenerate cDNA se		Human soluble ztnf	Expression vector		ine my	erate c	

ALIGNMENTS

```
RESULT 1
AAS92411
ID AAZ92
XX AAZ9
XX AAZ9
XX CDNA
DT 05-J
DT 05-J
DT WWW IMMN
KW IMMN
IMMN
KW IMMN
KW
06-JUL-1998;
13-JUL-1998;
23-JUL-1998;
12-AUG-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TNF receptor family; tumour necrosis factor; HDTEA84; HSLJD37R; Rank-like protein; RANKL; immune disorder; inflammation; allergy; immunosuppressant; antiarthritic; antirheumatoid; antiinflammatory; dermatological; antithyroid; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cDNA encoding human Rank-like protein RANKL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       05-JUN-2000
                                                                                                                                                                                                                    06-JUL-1999;
                                                                                                                                                                                                                                                                                               13-JAN-2000.
                                                                                                                                                                                                                                                                                                                                                                                   WO200001817-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAZ92411;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAZ92411 standard; cDNA; 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
98US-0110938.
98US-0114466.
98US-0093897.
98US-0132968.
                                                                                                                                                                                                                    99WO-US12366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers 78..773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /*tag=  a
/product= "Human RANKL"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQ ID NO:22
```

```
δÃ
                                    Вþ
                                                                  Qy
                                                                                                                                   Qy
                                                                                                     В
                                                                                                                                                                       밁
                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                           DЬ
                                                                                                                                                                                                                                                                                                                                        Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                            CC human GC Chemokine HGC5; human deubiquitinating proteins Dubl1 and Dubl CC (12; human MD-1 and human and murine MD-2 proteins which exhibit the CC properties of ligands for proteins comprising a leucine-rich motif CC (LRR); human cyclin E2; cDNAs encoding these proteins; and antibodies CC against these proteins. The proteins can be used for modulating the CC physiology or development of a cell. They can be used for modulating the CC of substrates (e.g., prostaglandin-like molecules), to modulate or CC mediate cellular interactions (e.g., induce or prevent trafficking, CC proteins which are important in various cellular processes such as the CC deubiquitination of proteins or cell cycle regulation. The products can be used for treating medical conditions such as immune, inflammatory or CC allergic disorders, or abnormal cellular proliferation, for example, CC cancers or degenerative conditions. They can be used to modulate immune cresponses in disease states e.g., autoimmune disorders, including CC autoimmune thyroiditis, as well as acute and chronic inflammatory CC responses in which T cell activation, expansion, and/or immunological T CC cell memory play an important role. Sequences AAS92404 encodes the DNAs encoding TNF receptor family-related proteins. AAX92404 encodes the human protein HDTEA84, AAX92405-292407 encode human HSLD37R proteins, CC encode human RANKI. nroteins.
                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bates En
Hedrick
                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to a number of primate and/or rodent proteins, are the genes which encode them. The invention encompasses human dendritic cell prostaglandin transporter (DC-PGT); the TNF (tumour necrosis factor) receptor family-related proteins HDTEA84, HSLID37R and RANKL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  degenerative conditions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New isolated mammalian genes, used to develop products for treating e.g. immune, inflammatory or allergic abnormalities, cancers or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    P-PSDB;
     301
                                      318
                                                                                                       258
                                                                                                                                                                         198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (SCHE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18-AUG-1998;
11-SEP-1998;
                                                                                                                                      181
                                                                                                                                                                                                         121
                                                                                                                                                                                                                                          138
                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                           78
GACCAAGAGTGCATCCCGTGCACGAAGCAGACCCCCCACCTCTGAGGTTCAATGTGCCTTC
                                                  GCTGTCTGTGGGGACTGTTTGCCCCAGGTTCTACCGAAAGACACGCATTGGAGGCCTGCAG
                                                                                                                      TGCATCACCTGTGCTGTCATCAATCGTGTTCAGAAGGTCAACTGCACAGCTACCTCTAAT
                                                                                                                                                                                     TGCACAGCCTGCCCTCCTCGCAGGTACAAAAGCAGCTGGGGCCACCACAAATGTCAGAGT
                                                                                                                                                                                                                                                      TGTGGTCCTGGACAGGAGCTATCCAAGGATTGTGGTTATGGAGAGGGGTGGAGATGCCTAC
                                                                                                                                                                                                                                                                                                                       ATGGATTGCCAAGAAATGAGTACTGGGACCAATGGGGACGGTGTGTCACCTGCCAACGG
                                 GCTGTCTGTGGGGACTGTTTGCCCAGGTTCTACCGAAAGACACGCATTGGAGGCCTGCAG
                                                                                                   TGCATCACCTGTGCTGTCATCAATCGTGTTCAGAAGGTCAACTGCACAGCTACCTCTAAT
                                                                                                                                                                                                                                      TGTGGTCCTGGACAGGAGCTATCCAAGGATTGTGGTTATGGAGAGGGTGGAGATGCCTAC
                                                                                                                                                                    TGCACAGCCTGCCTCGTCGCAGGTACAAAAGCAGCTGGGGGCCACCACAAATGTCAGAGT
                                                                                                                                                                                                                                                                                                     ATGGATTGCCAAGAAAATGAGTACTGGGGACCAATGGGGGACGGTGTGTCACCTGCCAACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2000-171015/15.
DB; AAY77468.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EEM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ) SCHERING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JA, Wang L,
F, Mahony D,
                                                                                                                                                                                                                                                                                                                                                                                                                                            932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Page 176-177;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Lebecque SJE,
                                                                                                                                                                                                                                                                                                                                                                          100.0%;
llarity 100.0%;
Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                            BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RANKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  98US-0136214.
98US-00999999.
                                                                                                                                                                                                                                                                                                                                                                                                                                            205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          proteins.
                                                                                                                                                                                                                                                                                                                                                                                                                                          A; 260 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SJE, Murphy Zlotnik A, Lees EM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               218pp;
                                                                                                                                                                                                                                                                                                                                                                          0,
                                                                                                                                                                                                                                                                                                                                                                                        Score 693; DB 21;
Pred. No. 6.9e-198;
                                                                                                                                                                                                                                                                                                                                                                                                                                            246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               English.
                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Murgolo
                                                                                                                                                                                                                                                                                                                                                                                                                                         G;
                                                                                                                                                                                                                                                                                                                                                                                                                                         220 T; 1 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mattson JD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NJ,
                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Greene
                                                                                                                                                                                                                                                                                                                                                                                                      Length
                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gorman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JR,
                                                                                                                                                                                                                                                                                                                                                                                                       932;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Johnston
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DM;
                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                        60
                                  377
                                                                                                   317
                                                                                                                                   240
                                                                                                                                                                    257
                                                                                                                                                                                                   180
                                                                                                                                                                                                                                     197
                                                                                                                                                                                                                                                                                                     137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         the
                                                                                                                                                                                                                                                                                                                                                                        0;
```

```
RESULT 2
AAF27998
ID AAF2
XX Hore
XX H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                                                                                                                                                                            16-JUL-1999;
18-AUG-1999;
20-AUG-1999;
10-SEP-1999;
                                                                                                                                                     Nucleic acids encoding 2 human tumor necrosis factor receptor polypeptides ((TR13) and (TR14)), useful for the prevention, and treatment of, e.g. cancers, acquired immune deficiency synypohidrotic ectodermal dysplasia
                                                                                                                Example
                                                                                                                                                                                                                                                                        P-PSDB;
                                                                                                                                                                                                                                                                                               WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                graft rejection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human TR14 receptor coding sequence SEQ
                                                                                                                                                                                                                                                                                                                                                                                  (HUMA-) HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14-JUL-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    25-JAN-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200105834-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   08-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAF27998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAF27998 standard; DNA; 3861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                      2001-112682/12.
DB; AAB35330.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGTCCCAAGTCTCTTGGGCCCCTGGCAGCCTTGCCCAGTTGTTCTCTCTGGACTCTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GATAAAACAGCAAAGGAGGAATCTCTCTTCCCCGTGCCACCCAGCAAGGAGACCAGTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAGTCCCAAGTCTCTTGGGCCCCTGGCAGCCTTGCCCAGTTGTTCTCTCTGGACTCTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GATAAAACAGCAAAGGAAGGAATCTCTCTCTCCCCGTGCCACCCAGCAAGGAGACCAGTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCACTGGTGAGCCAGCCTAGTGGTGTTTACCCTGGCCCTTCCTGGGGCCTCTTCTTCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAGTTGAGCTTAGTGGAGGCAGATGCACCCACAGTGCCCCCTCAGGAGGCCACACTTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   tumour necrosis factor receptor; TR13;
                                                                                                                7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                autoimmune disease; allergy; inflammatory disease;
ejection; apoptosis; cardiovascular disease; aneurysm;
                                                                                                              Page
                                                                                                                                                                                                                                                                                                                                       N;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2000WO-US19343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first
                                                                                                                                                                                                                                                                                                                                       J,
                                                                                                                                                                                                                                                                                                                                                                                GENOME
                                                                                                                                                                                                                                                                                                                                                                                                                         99US-0144087.
99US-0149450.
99US-0149712.
99US-0153089.
                                                                                                              373-376;
                                                                                                                                                                                                                                                                                                                                       Young
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               entry)
                                                                                                                                                                                                                                                                                                                                                                                  SCI INC
                                                                                                            418pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ₿P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   or; TR13; TR14; infect inflammatory disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ö:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          infection;
                                                                                                                                                                               syndrome
                                                                                                                                                                                                 diagnosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   557
                                                                                                                                                                               and
```

The present invention provides the protein and coding sequences of the human tumour necrosis factor receptors TR13 and TR14. These sequences useful in the diagnosis and treatment of many diseases, including cancautoimmune diseases, cardiovascular disorders, allergies,

the

are

```
RESULT 3
AAF28049
ID AAF2
XX
AC AAF2
XX
DT 08-M
XX
Huma
XX
Huma
XX
Graf
XX
Huma
                                                                                                                            δ
                                                                                                                                           Дb
                                                                                                                                                     γ
                                                                                                                                                                   В
                                                                                                                                                                                  Qy
                                                                                                                                                                                                 Ъ
                                                                                                                                                                                                             ρ
                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                       5
                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                δÃ
                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                            Š
                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                       Вр
                                                                                                                                                                                                                                                                                                                                                 δÃ
                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                        뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                   Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8 × 6 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
             graft rejection; ap
                                                                                                                  3826
                                                                                                                                                                       3706
                                                                                                                                                                                                  3646
                                                                                                                                                                                                                             3586
                                                                                                                                                                                                                                                        3526
                                                                                                                                                                                                                                                                                   3466
                                                                                                                                                                                                                                                                                                                                                                   3286
                                                                                                                                                                                                                                                                                                                                                                                                                         3166
                                                      08-MAY-2001
                                                                                 AAF28049 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            neurodegenerative
infections.
                                                                                                                                                                                                               481
                                                                                                                                                                                                                                          421
                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local
                                                                                                                                                                                                                                                                                                                                                                                                                      GATAAAACAGCAAAGGAGGAATCTCTCTTCCCCGTGCCACCCAGCAAGGAGACCAGTGCT
                                                                                                                                                                                               TGCATCACCTGTGCTGTCATCAATCGTGTTCAGAAGGTCAACTGCACAGCTACCTCTAAT
                                                                                                                                                                                                                                                                                                                                                                                           TGTGGTCCTGGACAGGAGCTATCCAAGGATTGTGGTTATGGAGAGGGGGGGAGATGCCTAC
                                                                                                                               CCTATACCACAACAGCAGCAGGGGCCTGAAATG
                                                                                                                                          CAGTTGAGCTTAGTGGAGGCAGATGCACCCACAGTGCCCCCTCAGGAGGCCACACTTGTT
                                                                                                                                                                                                                                                            CAGTTGAGCTTAGTGGAGGCAGATGCACCCACAGTGCCCCCTCAGGAGGCCACACTTGTT
                                                                                                                                                                                                                                                                                       GACCAAGAGTGCATCCCGTGCACGAAGCAGACCCCCACCTCTGAGGTTCAATGTGCCTTC
                                                                                                                                                                                                                                                                                                                  GCTGTCTGTGGGGACTGTTTGCCCCAGGTTCTACCGAAAGACACGCATTGGAGGCCTGCAG
                                                                                                                                                                                                                                                                                                                                                                         TGCACAGCCTGCCTCCTCGCAGGTACAAAAGCAGCTGGGGCCACCACAAATGTCAGAGT
                                                                                                                  CCTATACCACAACAGCAGCAGGGGCCTGAAATG
                                                                                                                                                                                                                                                                                 GACCAAGAGTGCATCCCGTGCACGAAGCAGACCCCCACCTCTGAGGTTCAATGTGCCTTC
                                                                                                                                                                                                                                                                                                            GCTGTCTGTGGGGACTGTTTGCCCAGGTTCTACCGAAAGACACGCATTGGAGGCCTGCAG
                                                                                                                                                                                                                                                                                                                                                                688;
            tumour necrosis factor receptor; TR13; TR14; autoimmune disease; allergy; inflammatory direjection; apoptosis; cardiovascular disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP;
                                        sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   diseases,
                                                                                 DNA;
                                                     entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                          98.8%;
99.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Α;
                                                                                 3152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              929
                                        SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 685; DB Pred. No. 3.3e 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 graft rejection,
                                                                                 ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C;
                                        Ωï
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              960
                                        <u>«</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             G;
                                        60
                                                                                                                  3858
                                                                                                                               693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1071
                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 22;
.3e-195;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Τ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 inflammation,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                    disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
             aneurysm;
                           infection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 aneurysms
                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
             ds
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                 3345
                                                                                                                                                                                                                                                                                                                                                                                             3285
                                                                                                                                                        660
                                                                                                                                                                                                 3705
                                                                                                                                                                                                              540
                                                                                                                                                                                                                            3645
                                                                                                                                                                                                                                         480
                                                                                                                                                                                                                                                      3585
                                                                                                                                                                                                                                                                   420
                                                                                                                                                                                                                                                                                  3525
                                                                                                                                                                                                                                                                                                           3465
                                                                                                                                                                                                                                                                                                                                      3405
                                                                                                                                                                                                                                                                                                                                                                                                                        3225
                                                                                                                                                                                                                                                                                              360
                                                                                                                                                                                                                                                                                                                                                                              180
                                                                                                                                                                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                                                                                                                                                                     60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                   밁
                             δÃ
                                             밁
                                                       δÃ
                                                                        망
                                                                                    ρy
                                                                                                  Ъ
                                                                                                             QΥ
                                                                                                                             В
                                                                                                                                         δõ
                                                                                                                                                      DЪ
                                                                                                                                                                    Š
                                                                                                                                                                                  DЬ
                                                                                                                                                                                             δõ
                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                        Q
                                                                                                                                                                                                                                        Query Match
Best Local S
Matches 691
```

```
16-JUL-1999;
18-AUG-1999;
20-AUG-1999;
10-SEP-1999;
                            Nucleic acids encoding 2 human tumor necrosis polypeptides ((TRI3) and (TRI4)), useful for t and treatment of, e.g. cancers, acquired immur hypohidrotic ectodermal dysplasia.
Claim 6; Page 412-413; 418pp; English
                                                                                                          P-PSDB;
                                                                                                                                                        Ruben
                                                                                                                                                                                                                                                                                                14-JUL-2000;
                                                                                                                                                                                     (HUMA-) HUMAN
                                                                                                                                                                                                                                                                                                                              25-JAN-2001
                                                                                                                                                                                                                                                                                                                                                            WO200105834-A1
                                                                                                                         2001-112682/12
                                                                                                                                                        SM,
                                                                                                          AAB35335
                                                                                                                                                       N.
                                                                                                                                                                                                                                                                                                2000WO-US19343
                                                                                                                                                       J,
                                                                                                                                                                                       GENOME
                                                                                                                                                                                                                  99US-0149450.
99US-0149712.
99US-0153089.
                                                                                                                                                                                                                                                                   99US-0144087
                                                                                                                                                       Young
                                                                                                                                                                                       SCI INC
                                                          for the prevention,
```

immune deficiency syndrome diagnosis yndrome and

The present invention provides the protein and coding sequences of the human tumour necrosis factor receptors TRI3 and TRI4. These sequences useful in the diagnosis and treatment of many diseases, including can autoimmune diseases, cardiovascular disorders, allergies, neurodegenerative diseases, graft rejection, inflammation, aneurysms and proteins. cancer are

Sequence 3152 Β₽; 840 **A** 739 Ç 663 G; 908 Τ; 2 other;

Length

480 486 426 360 366 300 306 240 246 180 187 121 127 61 67 TGTGGTCCTGGACAGGAGCTATCCAAGGATTGTGGTTATGGAGAGGGTGGAGATGCCTAC CTACTGCAAGCAGTTCTTCAACAGACATTGCCAGCGTGGAGGTTTGCTGCAGTTTTGAGGC TGCTGTCTGTGGGGACTGTTTGCCCCAGGTTCTACCGAAAGACACGCATTGGAGGCCTGCA TTGCATCACCTGTGCTGTCATCAATCGTGTTCAGAAGGTCAACTGCACAGCTACCTCTAA GGACCAAGAGTGCATCCCGTGCACGAAGCAGACCCCCACCTCTGAGGTTCAATGTGCCTT GGACCAAGAGTGCATCCCGTGCACGAAGCAGACCCCCACCTCTGAGGTTCAATGTGCCTT TGCTGTCTGTGGGGACTGTTTGCCCCAGGTTCTACCGAAAGACACGCATTGGAGGCCTGCA 691; Similarity 96.5%; nilarity 99.6%; Conservative 0; Score 668.4; DB Pred. No. 2.9e-190; Mismatches .9e-190; nes 1; Indels 2; Gaps 539 545 479 485 419 425 359 365 299 245 179 186 126 60 2

0;

```
ARSUSULT 4
AASO5944
ID AASO
XX AASO
XX AASO
XX AASO
XX Huma
XX Huma
XX Huma
XX Gene
XX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     рЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22-OCT-1999;
02-NOV-1999;
17-JUL-2000;
01-AUG-2000;
                 leiomyoma receptor (MMLR) is a member of the tumour necrosis factor receptor (TMFR) family. The UMLR (also known as ztnfrll) gene maps to chromosome Xql1-ql2. Amino acid residues of UMLR involved in ligand binding, consisting of residues 1-X (where X is 129-136) are useful for inhibiting the quantity of lung, breast carcinoma, melanoma, osteosarcoma or lymphoma cells expressing UMLR protein. UMLR polypeptides or its fragments are useful diagnostically or therapeutically for
                                                                                                                                                                                                                                                                                                                  Uterine myometrium leiomyoma receptor polypeptides and polynucleotides for modulating inflammation, tumour growth, metastasis, cellular maturation, detecting modulators and as diagnostic indicators of cance:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo
                                                                                                                                                                                                                                                Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 23-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  breast carcinoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAS05944 standard; cDNA; 1162 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Foster
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ( OMYZ)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 03-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200130850-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ľ
                                                                                                                                                                                               present sequence
                                                                                                                                                                                                                                                                                                                                                                                                                      2001-300488/31
DB; AAU03106.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGATAAAACAGCAAAGGAGGAATCTCTCTTCCCCGTGCCACCCAGCAAGGAGAGCAGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCTATACCACAACAGCAGCAGGGGCCTGAAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCCTATACCACAACAGCAGCAGGGGGCCTGAAATG 693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTACTGCAAGCAGTTCTTCAACAGACATTGCCAGCGTGGAGGTTTGCTGCAGTTTGAGGC
                                                                                                                                                                                                                                                9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGAGTCCCAAGTCTCTTGGGCCCCTGGCAGCCTTGCCCAGTTGTTCTCTCTGGACTCTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   uterine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               uterine myometrium leiomyoma receptor; UMLR; ztnfrll; necrosis factor receptor; TNFR; chromosome Xqll-ql2; carcinoma; uterus melanoma; osteosarcoma; lymphoma; w
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ZYMOGENETICS
                                                                                                                                                                                                                                           Page 114-116; 148pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99US-0163215.
2000US-0218769.
2000US-0222221.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Yee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2000WO-US29304.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           myometrium leiomyoma receptor (UMLR) cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99US-0160880.
99US-0163215.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
104.913
/*tag= a
/product= "UMLR"
/note= "Also known a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INC.
                                                                                                                                                                                          encoding for a novel human uterine myometrium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Henne
in
uterus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ₽,
                                                                                                                                                                                                                                           English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Presnell
melanoma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NFK; chromosome Xq11-q12; lung osteosarcoma; lymphoma; wound
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ztnfr11"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Yao
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Υ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Novak
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sequence
                                                                                                                                                                                                                                                                                                                     of cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cancer;
healing;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   599
```

RESULT 5
AAC63993
ID AAC6
XX
AC AAC6
XX
DT 14-F
XX
DE Huma
XX
KW Huma

14-FEB-2001

AAC63993 standard;

cDNA;

ΒP

Human; TNFR homologue;
apoptosis; NF-kappa-B

; tumour necrosis factor receptor; DNA101848; activation; proinflammatory response; Human TNFR homologue clone DNA101848 cDNA

```
Ъ
                 Qy
                                             Ъ
                                                                    Qy
                                                                                              Db
                                                                                                                     Qy
                                                                                                                                              Вр
                                                                                                                                                                     2
                                                                                                                                                                                                Ъ
                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                            DЬ
                                                                                                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                                                                           Db
                                                                                                                                                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                          DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3333333333XX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    promoting wound healing, and for generating vaccines for cancer therapy. They are also useful for studying cell-cell interactions, apoptosis, fertilisation, development, immune recognition, growth control, tumour suppression and embryo maturation in vitro and in vivo, and for treating disorders associated with them. UMLR is also useful for identifying inhibitors of its activity, and for preparing antibodies which can be used to detect UMLR expression. UMLR polynucleotide sequences are useful
                        601
                                               644
704
                                                                      541
                                                                                              584
                                                                                                                       481
                                                                                                                                               524
                                                                                                                                                                      421
                                                                                                                                                                                                464
                                                                                                                                                                                                                                              404
                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                              344
                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                            284
                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                            224
                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                            164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             probes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 ATGGATTGCCAAGAAAATGAGTACTGGGGACCAATGGGGACGGTGTGTCACCTGCCAACGG
                     GAGTCCCAAGTCTCTTGGGCC
                                               GATAAAACAGCAAAGGAAGGAATCTCTCTTCCCCGTGCCACCCAGCAAGGAGACCAGTGCT
                                                             GATAAAACAGCAAAGGAGGAATCTCTCTTCCCCGTGCCACCCAGCAAGGAGACCAGTGCT
                                                                                              TACTGCAAGCAGTTCTTCAACAGACATTGCCAGCGTGGAAGGTTTGCTGCAGTTTGAGGCT
                                                                                                         TACTGCAAGCAGTTCTTCAACAGACATTGCCAGCGTGGAGGTTTGCCTGCAGTTTGAGGCT
                                                                                                                                             GCTGTCTGTGGGGACTGTTTGCCCAGGTTCTACCGAAAGACACGCATTGGAGGCCTGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGTCCCAAGAGTCCTTTACC
                                                                                                                                                                                                                      CAGTTGAGCTTAGTGGAGGCAGATGCACCCACAGTGCCCCCTCAGGAGGCCACACTTGTT
                                                                                                                                                                                                                                                                                                                                                                                                        TGCACAGCCTGCCCTCCTCGCAGGTACAAAAGCAGCTGGGGGCCACCACAAATGTCAGAGT
                                                                                                                                                                                                                                                                                             GCTGTCTGTGGGGACTGTTTGCCCAGGTTCTACCGAAAGACACGCATTGGAGGCCTGCAG
                                                                                                                                                                                                                                                                                                                                                                   TGCATCACCTGTGCTGTCATCAATCGTGTTCAGAAGGTCAACTGCACAGCTACCTCTAAT
                                                                                                                                                                                                                                                                                                                                                                                           TGCACAGCCTGCCCTCCTCGCAGGTACAAAAGCAGCTGGGGCCCACCACAAATGTCAGAGT
                                                                                                                                                                                                                                                                                                                                            TGCATCACCTGTGCTGTCATCAATCGTGTTCAGAAGGTCAACTGCACAGCTACCTCTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGTGGTCCTGGACAGGAGCTATCCAAGGATTGTGGTTATGGAGAGGGTGGAGATGCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           al Similarity
615; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              οŗ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                          BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          255 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     88.2%;
99.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           diagnostic indicators of cancer and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          327
                      621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 611.4;
Pred. No. 2.4e
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         c;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         314 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          es 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ₩;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          for gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                     480
                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60
                                             703
                                                                      600
                                                                                              643
                                                                                                                                             583
                                                                                                                                                                                               523
                                                                                                                                                                                                                                              463
                                                                                                                                                                                                                                                                   360
                                                                                                                                                                                                                                                                                            403
                                                                                                                                                                                                                                                                                                                   300
                                                                                                                                                                                                                                                                                                                                                                                          283
                                                                                                                                                                                                                                                                                                                                                                                                                                          223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           163
```

```
Q
                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                        δÃ
                                             맑
                                                                                                                                   Qy
                                                                                                                                                                  Дb
                                                                                                                                                                                             Ωy
                                                                                                                                                                                                                              рЬ
                                                                                                                                                                                                                                                        Ω
                                                                                                                                                                                                                                                                                                                                                                                        CC (TNER) homologues DNA98853 (AAR29533) and to the complements (AAC63992, CC AAC63994) of nucleic acids encoding them (AAC63991, AAC63993), and to the complements (AAC63992, CC AAC63994) of nucleic acids encoding the TNER homologues. The invention CC also relates to vectors and host cells comprising DNA98853 or DNA101848 CC proteins, antibodies against the DNA98853 or DNA101848 proteins. The CC recombinant expression of the DNA98853 or DNA101848 proteins. The CC recombinant expression of the DNA98853 or DNA101848 proteins. The CC invention further encompasses a method of modulating apoptosis, CC NF-kappa-B (nuclear factor kappa-B) activation, or a proinflammatory or autoimmune response using the DNA98853 or DNA101848 proteins, and a CC method of inhibiting or neutralising EDA-A2 protein biological activity in mammalian cells using DNA98853 or DNA101848 specific antibodies. The CC NF-kappa-B activation, proinflammatory or autoimmune responses in CC mammalian cells using DNA98853 or DNA101848 specific antibodies. The CC antibodies) can be used to inhibit or neutralise EDA-A2 protein CC antibodies can be used to inhibit or neutralise EDA-A2 protein CC antibodies can be used to inhibit or neutralise EDA-A2 protein conclude acids can be used as hybridisation probes in chromosome and gene CC therapy. The present sequence represents cDNA encoding DNA101848 (ATCC consequence).
                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Goddard A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200061757-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         autoimmune response; modulation; antibody; EDA-A2 inhibition;
gene mapping; antisense therapy; gene therapy; ATCC 203907; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12-APR-2000; 2000WO-US09699.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (GETH ) GENENTECH INC
                                                                                                           124
                                                                                                                                         121
                                                                                                                                                                       64
                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                            Local
                                                                                                                                                                                                                                   4
GCTGTCTGTGGGGACTGTTTGCCCAGGTTCTACCGAAAGACACGCATTGGAGGCCTGCAG
                                                                                                                      TGCACAGCCTGCCCTCGCAGGTACAAAAGCAGCTGGGGCCACCACAAATGTCAGAGT
                                                                                                                                                                 TGTGGTCCTGGACAGGAGCTATCCAAGGATTGTGGTTATGGAGAGGGTGGAGATGCCTAC
                                                               TGCATCACCTGTGCTGTCATCAATCGTGTTCAGAAGGTCAACTGCACAGCTACCTCTAAT
                                                                                                        TGCACAGCCTGCCCTCGCAGGTACAAAAGCAGCTGGGGGCCACCACAGATGTCAGAGT
                                                                                                                                                                                                                                            ATGGATTGCCAAGAAATGAGTACTGGGACCAATGGGGACGGTGTGTCACCTGCCAACGG
                                            TGCATCACCTGTGCTGTCATCATCGTGTTCAGAAGGTCAACTGCACAGCTACCTCTAAT
                                                                                                                                                                                                                              ATGGATTGCCAAGAAAATGAGTACTGGGGACCAATGGGGACGGTGTGTCACCTGCCAACGG
                                                                                                                                                                                                                                                                                            610;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27; Fig
                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                        899
                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pan J,
                                                                                                                                                                                                                                                                                                                                                      ВP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ω
••
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99US-0128849
                                                                                                                                                                                                                                                                                                                                                      208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     82pp; English
                                                                                                                                                                                                                                                                                                         87.98;
99.88;
                                                                                                                                                                                                                                                                                                                                                     Ą
                                                                                                                                                                                                                                                                                                                                                      259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Σ,
                                                                                                                                                                                                                                                                                         Score 609.4;
Pred. No. 8.7e
0; Mismatches
                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                     C;
                                                                                                                                                                                                                                                                                                                                                     239
                                                                                                                                                                                                                                                                                                                                                     G; 193
                                                                                                                                                                                                                                                                                          8.7e-173;
ches 1;
                                                                                                                                                                                                                                                                                                                                                     T; 0 other;
                                                                                                                                                                                                                                                                                                                     DB 22; Length
                                                                                                                                                                                                                                                                                                                       , 899;
                                                                                                                                                                                                                                                                                         0,
                                                                                                                                                                                                                                                                                       Gaps
                                                                          240
                                                                                                        183
                                                                                                                                    180
                                                                                                                                                                  123
                                                                                                                                                                                                120
                                                                                                                                                                                                                                63
                                                                                                                                                                                                                                                            60
               300
                                            243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 tor
                                                                                                                                                                                                                                                                                         0
```

```
RESULT 6
AAC63994/c
ID AAC63994 standard; cDNA;
                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                         WPI;
                                                                         Claim 27; Fig 3; 82pp; English.
                                                                                                                                                     Goddard
                                                                                                                                                                                                                                                                               apoptosis; NF-kappa-B activation; proinflammatory response;
autoimmune response; modulation; antibody; EDA-A2 inhibition;
                                                                                                                            P-PSDB;
                                                                                                                                                                    (GETH ) GENENTECH
                                                                                                                                                                                     12-APR-1999;
                                                                                                                                                                                                     12-APR-2000; 2000WO-US09699
                                                                                                                                                                                                                       19-OCT-2000
                                                                                                                                                                                                                                       WO200061757-A1
                                                                                                                                                                                                                                                        Homo
                                                                                                                                                                                                                                                                         gene
                                                                                                                                                                                                                                                                                                 Human; TNFR homologue; tumour necrosis factor receptor;
                                                                                                                                                                                                                                                                                                                 Human TNFR homologue clone DNA101848 cDNA complement.
                                                                                                                                                                                                                                                                                                                                    14-FEB-2001
                                                                                                                                                                                                                                                                                                                                                     AAC63994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 424
                                                                                                                                                                                                                                                                                                                                                                                                               604
                                                                                                                                                                                                                                                                                                                                                                                                                               601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGTTGAGCTTAGTGGAGGCAGATGCACCCACAGTGCCCCCCTCAGGAGGCCACACTTGTT
                                                                                                                           2001-070561/08.
DB; AAB29534.
                                                                                                                                                                                                                                                        sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              mapping; antisense therapy; gene
                                                                                                                                                                                                                                                                                                                                                                                                               GAGTCCCAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                              GAGTCCCAAGT 611
                                                                                                                                                                                                                                                                                                                                                                                                                                              GATAAAACAGCAAAGGAGGAATCTCTCTCCCCGTGCCACCCAGCAAGGAGACCAGTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                       GATAAAACAGCAAAGGAGGAATCTCTCTTCCCCGTGCCACCCAGCAAGGAGACCAGTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAGTTGAGCTTAGTGGAGGCAGATGCACCCACAGTGCCCCCTCAGGAGGCCACACTTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GACCAAGAGTGCATCCCGTGCACGAAGCAGACCCCCACCTCTGAGGTTCAATGTGCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GACCAAGAGTGCATCCCGTGCACGAAGCAGACCCCCACCTCTGAGGTTCAATGTGCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCTGTCTGTGGGGACTGTTTGCCCCAGGTTCTACCGAAAGACACGCATTGGAGGCCTGCAG
                                                                                                                                                    Ą
                                                                                                                                                    Pan
                                                                                                                                                                                     99US-0128849
                                                                                                                                                    J,
                                                                                                                                                                                                                                                                                                                                                                                                               614
                                                                                                                                                                      INC
                                                                                                                                                                                                                                                                                                                                  entry)
                                                                                                                                                    Z
                                                                                                                                                                                                                                                                                                                                                                     899
                                                                                                                                                                                                                                                                       therapy; ATCC
                                                                                                                                                                                                                                                                                                 DNA101848;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  420
                                                                                                                                                                                                                                                                                                                                                                                                                                               603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     303
                                                                                                          for
```

The invention relates to the human tumour necrosis factor receptor (TNFR) homologues DNA98853 (AAB2953) and DNA101848 (AAB29534), to cD encoding themm (AAC63991, AAC63992), and to the complements (AAC63992, AAC63994) of nucleic acids encoding the TNFR homologues. The inventionalso relates to vectors and host cells comprising DNA98853 or DNA10184 nucleic acids, fusion proteins comprising the DNA98853 or DNA101848 proteins, antibodies against the DNA98853 or DNA101848 proteins. The

The invention 53 or DNA101848

CDNA

```
RESULT 7
AAC62232
ID AAC6
XX
AC AAC6
XX
DT 06-M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local S
Matches 610
    06-MAR-2001
                                                  AAC62232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                invention further encompasses a method of modulating apoptosis, NF-kappa-B (nuclear factor kappa-B) activation, or a proinflammatory or autoimmune response using the DNA98853 or DNA101848 proteins, and a method of inhibiting or neutralising EDA-A2 protein biological activity in mammalian cells using DNA98853 or DNA101848-specific antibodies. The DNA98853 and/or DNA101848 proteins can be used for modulating apoptosis, NF-kappa-B activation, proinflammatory or autoimmune responses in mammalian cells. DNA98853 and/or DNA101848 protein immunoadhesins (e.g., antibodies) can be used to inhibit or neutralise EDA-A2 protein biological activity in mammalian cells. DNA98853 and DNA101848 nucleic acids can be used as hybridisation probes in chromosome and gene mapping, in the generation of antisense RNA and DNA, and in gene therapy. The present sequence represents the complement of cDNA encoding DNA101848 (ATCC 203907).
                          AAC62232;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                 601
                                                                                                           296
                                                                                                                                                         356
                                                                                                                                                                               541
                                                                                                                                                                                                       416
                                                                                                                                                                                                                                                     476
                                                                                                                                                                                                                             481
                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                  536
                                                                                                                                                                                                                                                                                                                                               596
                                                                                                                                                                                                                                                                                                                                                                                             656
                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                                                         716
                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      776
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  896
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        _
                                                                                                                                                                  GATAAAACAGCAAAGGAGGAATCTCTCTTCCCCGTGCCACCCAGCAAGGAGACCAGTGCT
                                                                                                                                                                                                  GAGTCCCAAGT
                                                                                                                                GAGTCCCAAGT
                                                                                                                                                                                                                                                 CAGTTGAGCTTAGTGGAGGCAGATGCACCCACAGTGCCCCCTCAGGAGGCCACACTTGTT
                                                                                                                                                                                                                                                                                                                                                         GACCAAGAGTGCATCCCGTGCACGAAGCAGACCCCCACCTCTGAGGTTCAATGTGCCTTC
                                                                                                                                                      GATAAAACAGCAAAGGAGGAATCTCTCTTCCCCGTGCCACCCAGCAAGGAGACCAGTGCT
                                                                                                                                                                                                                                                                                              CAGTTGAGCTTAGTGGAGGCAGATGCACCCACAGTGCCCCCTCAGGAGGCCACACTTGTT
                                                                                                                                                                                                                                                                                                                                            GACCAAGAGTGCATCCCGTGCACGAAGCAGACCCCCACCTCTGAGGTTCAATGTGCCTTC
                                                                                                                                                                                                                                                                                                                                                                                         GCTGTCTGTGGGGACTGTTTGCCCAGGTTCTACCGAAAGACACGCATTGGAGGCCTGCAG
                                                                                                                                                                                                                                                                                                                                                                                                     GCTGTCTGTGGGGACTGTTTGCCCCAGGTTCTACCGAAAGACACGCATTGGAGGCCTGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                     TGCATCACCTGTGCTGTCATCAATCGTGTTCAGAAGGTCAACTGCACAGCTACCTCTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGCATCACCTGTGCTGTCATCAATCGTGTTCAGAAGGTCAACTGCACAGCTACCTCTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGTGGTCCTGGACAGGAGCTATCCAAGGATTGTGGTTATGGAGAGGGTGGAGATGCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATGGATTGCCAAGAAATGAGTACTGGGACCAATGGGGACGGTGTGTCACCTGCCAACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGCACAGCCTGCCCTCGCAGGTACAAAAGCAGCTGGGGCCACCACAAATGTCAGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATGGATTGCCAAGAAAATGAGTACTGGGACCAATGGGGACGGTGTGTCACCTGCCAACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               610;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                  standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
   (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BP; 193 A;
                                                                                                          286
                                                                                                                                611
                                                 CDNA;
   entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         87.9%;
99.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           239 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                 ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1609.4;
No. 8.7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           208 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3.7e-173;
nes 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                            600
                                                                                                                                                     297
                                                                                                                                                                                                    357
                                                                                                                                                                                                                        540
                                                                                                                                                                                                                                                 417
                                                                                                                                                                                                                                                                       480
                                                                                                                                                                                                                                                                                                                    420
                                                                                                                                                                                                                                                                                                                                            537
                                                                                                                                                                                                                                                                                                                                                                  360
                                                                                                                                                                                                                                                                                                                                                                                        597
                                                                                                                                                                                                                                                                                                                                                                                                                                      657
                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                                                                                                                                                                                               300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
밁
                  Qy
                                            g
                                                                  Qy
                                                                                         В
                                                                                                              Qy
                                                                                                                                       Db
                                                                                                                                                            Qy
                                                                                                                                                                                      В
                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                        Qy
```

Qy

Вþ Qy

Д

QY DЪ

В Qy Ър Qy Ъ ρy Д Qy

B δÃ В QΥ В Qy DЬ Qy

304

```
Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                              The present sequence encodes a human DNA98853 polypeptide. The DNA98853 gene was amplified and cloned using a PCR-based method of the invention, called full length inverse polymerase chain reaction (FLIP). FLIP is also referred to as inverse long distance PCR, because of its ability to isolate long genes. The specification uses FLIP for amplifying and isolating a nucleic acid molecule of interest from a mixture of nucleic acid molecules. The method is useful for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New polymerase chain based molecule of interest from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CDS
                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     full length inverse PCR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               P-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (GETH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10-JAN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10-APR-2000;
                              301
                                                         244
                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200061741-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CDNA
                                                                                                              184
                                                                                                                                        181
                                                                                                                                                                     124
                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  inverse
                                                                                                                                                                                                                          64
                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                 4
                                                                                                                                                                                                                                                                                                           \vdash
ATGGATTGCCAAGAAAATGAGTACTGGGACCAATGGGGACGGTGTGTCACCTGCCAACGG
                                                                                                         TGCATCACCTGTGCTGTCATCAATCGTGTTCAGAAGGTCAACTGCACAGCTACCTCTAAT
                                                                                                                                                                                                                      TGTGGTCCTGGACAGGAGCTATCCAAGGATTGTGGTTATGGAGAGGGGGGAGATGCCTAC
                                                      GCTGTCTGTGGGGACTGTTTGCCCCAGGTTCTACCGAAAGACACGCATTGGAGGCCTGCAG
                                                                     GCTGTCTGTGGGGACTGTTTGCCCCAGGTTCTACCGAAAGACACGCATTGGAGGCCTGCAG
                                                                                                                                                                  TGCACAGCCTGCCCTCGTCGCAGGTACAAAAGCAGCTGGGGCCACCACAAATGTCAGAGT 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      СJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2000-679484/66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      encoding a human DNA98853 polypeptide
                                                                                                                                                                                                                                                                                                                                      610;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA58893;
                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2; Fig 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENENTECH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAB30547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                long distance
                                                                                                                                                                                                                                                                                                                                                                                            905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Grimaldi JC,
                                                                                                                                                                                                                                                                                                                                                                                                                   cloning a wide variety of
                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                          BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2000US-0480782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2000WO-US09554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99US-0128849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /rtag= a
/product=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers 4..903
                                                                                                                                                                                                                                                                                                                                                                                         210 A; 260 C; 240 G; 195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              full
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          31pp; English.
                                                                                                                                                                                                                                                                                                                                                  85.6%;
98.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  based cloning r
from a mixture
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               length inverse polymerase
PCR; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Milton
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "DNA98853"
                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                  Score 593.4;
Pred. No. 5.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ŝ
                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  method for isolating a nucleic e of nucleic acid molecules usir
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Yan
                                                                                                                                                                                                                                                                                                                                                                                                                   genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ĭ
                                                                                                                                                                                                                                                                                                                                   ).5e-168;
nes 1;
                                                                                                                                                                                                                                                                                                                                                                                          T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                DΒ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Υį
                                                                                                                                                                                                                                                                                                                                                                21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             chain
                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            reaction;
                                                                                                                                                                                                                                                                                                                                                                905;
                                                                                                                                                                                                                                                                                                                                     6
                                                                                                                                                                                                                                                                                                                                  Gaps
                                                     303
                                                                                  300
                                                                                                                                     240
                                                                                                                                                                                                                                                   120
                                                                                                                                                                                                                                                                              63
                                                                                                                                                                                                                                                                                                         60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              acid
                           360
                                                                                                          243
                                                                                                                                                                  183
                                                                                                                                                                                                                                                                                                                                   ۲.
```

```
RESULT 8
AAC58642
ID AAC5
XX AAC5
XX AAC5
XX AAC5
XX AAC5
XX Huma
XX Homo
XX Infil
XW Ostee
XW Infil
XW I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     õ
08-MAR-1999
10-MAR-1999
12-MAR-1999
23-MAR-1999
20-APR-1999
20-APR-1999
28-APR-1999
28-APR-1999
28-APR-1999
20-JUN-1999
23-JUN-1999
23-JUN-1999
23-JUN-1999
26-JUL-1999
26-JUL-1999
26-SEP-1999
08-SEP-1999
08-SEP-1999
08-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; immune related disease; diagnosis; antiinflammatory; cardiant; dermatological; antiarthritic; antirheumatic; immunosuppressive; haemostatic; antithyroid; antidiabetic; noctropic; neuroprotective; antianaemic; hepatotropic; virucide; antipsoriatic; antiallergic; antiasthmatic; systemic lupus erythematosus; rheumatoid arthritis; osteoarthritis; spondyloarthropathy; systemic sclerosis; sarcoidosis; idiopathic inflammatory myopathy; Sjogren's syndrome; thyroiditis; systemic vasculitis; autoimmune haemolytic anaemia; diabetes mellitus; sutoimmune thrombocytopaenia; immune-mediated renal disease; demyelinating disease; hepatobiliary disease; Whipple's disease; inflammatory bowel disease; gluten-sensitive enteropathy; autoimmune disease; immune-mediated skin disease; allergic disease; reminunological disease; transplantation associated disease; respective contents of the station associated disease; respective contents of the station
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        02-MAR-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200053758-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      graft rejection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               29-JAN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAC58642 standard; cDNA; 905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TACTGCAAGCAGTTCTTCAACAGACATTGCCAGCGT------GGAGGTTTGCTGCAGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TACTGCAAGCAGTTCTTCAACAGACATTGCCAGCGTGTTACAGGAGGTTTGCTGCAGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCACTGGTGAGCAGCCTAGTGGTGTTTACCCTGGCCTTCCTGGGGGCTCTTCTTCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRO5727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2000WO-US05841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
99US-0123618
99US-0123957
99US-0123775
99US-0128849
99WS-0131445
99US-01314287
99US-01312371
99US-0134287
99US-0144758
99US-0144758
99US-0144758
99US-0146222
99WS-0145294
99WO-US20111
99WO-US20111
99WO-US20044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               protein UNQ2448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99WO-US05028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   graft-versus-host-disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         encoding cDNA SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NO:296.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     420
```

```
02-DEC-1999;
16-DEC-1999;
20-DEC-1999;
30-DEC-1999;
30-DEC-1999;
05-JAN-2000;
06-JAN-2000;
06-JAN-2000;
11-FEB-2000;
                                                                                                                                                                                                                                                                15-SEP-1999
05-OCT-1999
29-OCT-1999
30-NOV-1999
30-NOV-1999
30-NOV-1999
01-DEC-1999
01-DEC-1999
02-DEC-1999
02-DEC-1999
                                                                                                                                                                                                            18-FEB-
                                                                                                                                                                                          (GETH )
                                                                                                                                                                                           GENENTECH INC.
                                                                                                                                                                                                     99WO-US2831
99WO-US2831
99WO-US2831
99WO-US2830
99WO-US2830
99WO-US2853
99WO-US2854
99WO-US2856
99WO-US2856
99WO-US3095
99WO-US3095
99WO-US3099
99WO-US3127
2000WO-US00277
2000WO-US00376
2000WO-US00376
2000WO-US0034341
2000WO-US04341
2000WO-US04341
                                                                                                                                                                                                                                                                                                      99WO-US21547.
99WO-US23089.
99US-0162506.
```

Kabakoff RC, Lu Y, F Stewart TA, Tumas D, Ashkenazi AJ, Kabakoff RC, Baker KP, Lu Y, Pan Watanabe CK, Goddard A, J, Pennica Wood WI, D, Gurney AL, He), Shelton DL, Yan M; Hebert C, DL, Smith <u><</u> Henzel ¥,

WPI; 2000-572271/53. P-PSDB; AAB33477.

Sixty four PRO polypeptides, useful in the diagnosis and treatment of immune related disorders, e.g. systemic lupus erythematosis, rheumatoid arthritis, osteoarthritis, thyroiditis and diabetes mellitus -

Claim 23; Fig 127; 309pp; English.

anaemia, autoimmune thrombocytopaenia, thyroiditis, diabetes mellitus, immune mediated renal disease, demyelinating diseases of the central and peripheral nervous systems, hepatobiliary diseases, inflammatory bowel disease, gluten-sensitive enteropathy and Whipple's disease, autoimmune or immune-mediated skin diseases, allergic diseases, immunological diseases of the lung, and transplantation associated diseases including graft rejection and graft-versus-host-disease. AAC58397 to AAC58578 represent PCR primers and hybridisation probes in the isolation of human PRO sequences. AAC58579 to AAC58642 and AAB33414 to AAB33477 represent human PRO polynucleotide and protein sequences given in the exemplification of the present invention. be used in the treatment of immune related diseases. The human proproteins, anti-PRO antibodies, agonists and antagonists are useful fureating and diagnosing immune related disorders. The disorders are selected from systemic lupus erythematosus, rheumatoid arthritis, osteoarthritis, juvenile chronic arthritis, spondyloarthropathies, systemic sclerosis, idiopathic inflammatory myopathies, Sjogren's syndrome, systemic vasculitis, sarcoidosis, autoimmune haemolytic The present invention describes sixty four human PRO proteins which be used in the treatment of immune related diseases. The human PRO $\,$ for used can

Sequence 905 210 Α, 260 Ç 240 G; 195 T; 0 other;

21;

Length

```
Ş
                                 В
                                                 οy
                                                                      В
                                                                                     Qy
                                                                                                            Query Match
Best Local S
Matches 610
              121
                                64
                                                  61
                                                                      4
TGCACAGCCTGCCTCGCAGGTACAAAAGCAGCTGGGGCCACCACAAATGTCAGAGT
                                                                  ATGGATTGCCAAGAAAATGAGTACTGGGACCAATGGGGACGGTGTGTCACCTGCCAACGG
                            TGTGGTCCTGGACAGGAGCTATCCAAGGATTGTGGTTATGGAGAGGGTGGAGATGCCTAC
                                                                                                             al Similarity
610; Conserv
                                                                                                             Conservative
                                                                                                                    98.98;
                                                                                                            0;
                                                                                                          Score 593.4; DB 21
Pred. No. 5.5e-168;
0; Mismatches 1;
                                                                                                           Indels
                                                                                                           6;
                                                                                                        Gaps
           180
                                                                    63
                                                                                      60
```

```
RESULT 9
AAC63991
XX AAC6
XX AAC6
ACC AAC6
AX Hum
XX Hum
X
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              γQ
                                                          Claim 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; TNFR homologue; tumour necrosis factor receptor; DNA98853; apoptosis; NF-kappa-B activation; proinflammatory response; autoimmune response; modulation; antibody; EDA-A2 inhibition; gene mapping; antisense therapy; gene therapy; ATCC 203906; ss.
                                                                                                                                                       WPI; 2001-070561/08.
P-PSDB; AAB29533.
                                                                                                                                                                                                                                                                  (GETH ) GENENTECH INC
                                                                                                                                                                                                                                                                                                            12-APR-1999;
                                                                                                                                                                                                                                                                                                                                                         12-APR-2000;
                                                                                                                                                                                                                                                                                                                                                                                                   19-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200061757-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAC63991 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGTGCTGAGTCCCAAGT 611
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TACTGCAAGCATTCTTCAACAGACATTGCCAGCGTGTTACAGGAGGTTTGCTGCAGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCACTGGTGAGCAGCCTAGTGGTGTTTTACCCTGGCCTTCCTGGGGGCTCTTCTTCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCACTGGTGAGCAGCCTGCTAGTGGTGTTTACCCTGGCCTTCCTGGGGGTCTTCTTCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TACTGCAAGCAGTTCTTCAACAGACATTGCCAGCGT-----GGAGGTTTGCTGCAGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGTTGAGCTTAGTGGAGGCAGATGCACCCACAGTGCCCCCTCAGGAGGCCACACTTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGTTGAGCTTAGTGGAGGCAGATGCACCCACAGTGCCCCCTCAGGAGGCCACACTTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GACCAAGAGTGCATCCCGTGCACGAAGCAGACCCCCACCTCTGAGGTTCAATGTGCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCTGTCTGTGGGGACTGTTTGCCCAGGTTCTACCGAAAGACACGCATTGGAGGCCTGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGCATCACCTGTGCTGTCATCAATCGTGTTCAGAAGGTCAACTGCACAGGTACCTCTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGTGCTGAGTCCCAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGCACAGCCTGCCTCCTCGCAGGTACAAAAGCAGCTGGGGCCACCACAGATGTCAGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TNFR homologue
                                                                                                                                                                                                                        A,
                    Fig 1;
                                                                                                                                                                                                                                                                                                                                                         2000WO-US09699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                          99US-0128849
                82pp; English
                                                                                                                                                                                                                      ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cDNA; 905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          clone DNA98853 cDNA.
                                                                                                                                                                                                                    Z
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             243
```

```
CC The invention relates to the human tumour necrosis factor receptor CC (TNFR) homologues DNA98853 (AAR29533) and DNA101848 (AAR29534), to cDNA CC encoding them (AAC63991, AAC63992), and to the complements (AAC63992, CC AAC63994) of nucleic acids encoding the TNFR homologues. The invention CC also relates to vectors and host cells comprising DNA98853 or DNA101848 CC proteins, antibodies against the DNA98853 or DNA101848 proteins. The CC invention further encompasses a method of modulating apoptosis, CC Proteins, antibodies against the DNA98853 or DNA101848 proteins. The CC invention further encompasses a method of modulating apoptosis, and a CC method of inhibiting or neutralising EDA-A2 protein biological activity or CC in mammalian cells using DNA98853 or DNA101848 specific antibodies. The CC DNA98853 and/or DNA101848 specific antibodies. The CC DNA98853 and/or DNA101848 specific antibodies. The CC DNA98853 and/or DNA101848 protein immunoadhesins (e.g., CC NF-kappa-B activation, proinflammatory or autoimmune responses in CC mammalian cells. DNA98853 and/or DNA101848 specific antibodies. The CC DNA98853 and DNA101848 protein immunoadhesins (e.g., CC NF-kappa-B activity in mammalian cells. DNA98853 and DNA101848 cc. or be used as hybridisation probes in chromosome and gene CC cherapy. The present sequence represents cDNA encoding DNA98853 (AFCC CC 203906).
```

Sequence 905 BP; 210 Α; 260 C; 240 G; 195 T; 0 other;

DЬ 밁 QУ Ωy DЬ В δÃ 망 Qy рЬ Qy Ъ QУ Вþ Qy Query Match Best Local Matches 604 595 484 544 481 424 421 364 361 304 301 244 241 184 181 124 121 64 61 \vdash GAGGCTGATAAAACAGCAAAGGAGGAATCTCTCTTCCCCGTGCCACCCAGCAAGGAGACC CAGTTGAGCTTAGTGGAGGCAGATGCACCCACAGTGCCCCCTCAGGAGGCCACACTTGTT AGTGCTGAGTCCCAAGT GAGGCTGATAAAACAGCAAAGGAGGAATCTCTCTCCCCGTGCCACCCAGCAAGGAGACC TACTGCAAGCAGTTCTTCAACAGACATTGCCAGCGT-----GGAGGTTTGCTGCAGTTT ATGGATTGCCAAGAAATGAGTACTGGGACCAATGGGGACGGTGTGTCACCTGCCAACGG CAGTTGAGCTTAGTGGAGGCAGATGCACCCACAGTGCCCCCTCAGGAGGCCACACTTGTT GCTGTCTGTGGGGGACTGTTTGCCCCAGGTTCTACCGAAAGACACGCCATTGGAGGCCTGCAG TGCACAGCCTGCCTCGCAGGTACAAAAGCAGCTGGGGCCACCACAGATGTCAGAGT TGCACAGCCTGCCCTCGCAGGTACAAAAGCAGCTGGGGCCACCACAAATGTCAGAGT TGTGGTCCTGGACAGGAGCTATCCAAGGATTGTGGTTATGGAGAGGGTGGAGATGCCTAC TGTGGTCCTGGACAGGAGCTATCCAAGGATTGTGGTTATGGAGAGGGTGGAGAGTGCCTAC al Similarity 610; Conserv Conservative 85.6%; 98.9%; 611 0; Score 593.4; Pred. No. 5.5 Mismatches 5.5e-168; nes 1; DB 22; Indels Length 905; 6; Gaps 594 534 603 543 483 480 423 420 363 360 303 300 243 240 183 180 123 120 63 60 1;

Qy DЬ QY B QΥ

Qy

B

AGTGCTGAGTCCCAAGT

RESULT 10

```
S
                                   Вb
                                                               ρ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAC63992/c
ID AAC639
                                                                                                                                                                                                 CC nucleic acids, fusion proteins comprising the DNA9883 or DNA101848
CC proteins, antibodies against the DNA98853 or DNA101848 proteins. The CC recombinant expression of the DNA98853 or DNA101848 proteins. The CC invention further encompasses a method of modulating apoptosis,
CC NF-Kappa-B (nuclear factor kappa-B) activation, or a proinflammatory or autoimmune response using the DNA98853 or DNA101848 proteins, and a cc method of inhibiting or neutralising EDA-A2 protein biological activity CC in mammalian cells using DNA98853 or DNA101848 specific antibodies. The CC DNA98853 and/or DNA101848 proteins can be used for modulating apoptosis, cc NF-Kappa-B activation, proinflammatory or autoimmune responses in CC mammalian cells. DNA98853 and/or DNA101848 protein immunoadhesins (e.g., antibodies) can be used to inhibit or neutralise EDA-A2 protein completed activity in mammalian cells. DNA98853 and DNA101848 protein in the generation of antisense RNA and DNA101848 protein in the generation of antisense RNA and DNA, and in gene cutorally. The present sequence represents the complement of the cDNA cc encoding DNA98853 (ATCC 203906).
                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New isolated nucleic acid encoding a tumor necrosis factor homolog modulating apoptosis, NF-kappaB activation, pro-inflammatory or autoimmune response in mammalian cells -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           encoding them (AAC63991, AAC63993), and to the complements (AAC63992, AAC63994) of nucleic acids encoding the TNFR homologues. The invention also relates to vectors and host cells comprising DNA98853 or DNA101848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; TNFR homologue; tumour necrosis factor receptor; DNA98853; apoptosis; NF-kappa-B activation; proinflammatory response; autoimmune response; modulation; antibody; EDA-A2 inhibition;
                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to the human tumour necrosis factor receptor (TNFR) homologues DNA98853 (AAR29533) and DNA101848 (AAR29534), to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Goddard A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                12-APR-2000; 2000WO-US09699.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200061757-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAC63992,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAC63992 standard; cDNA; 905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (GETH ) GENENTECH INC.
                                       902
   61
                                                                                                                      Local
                              ATGGATTGCCAAGAAAATGAGTACTGGGACCAATGGGGACGGTGTGTCACCTGCCAACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     mapping;
TGTGGTCCTGGACAGGAGCTATCCAAGGATTGTGGTTATGGAGAGGGTGGAGATGCCTAC 120
                                                                                                      al Similarity
610; Conserv
                                                                                                                                                                          905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Fig 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         homologue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pan J,
                                                                                                                                                                        BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   antisense therapy; gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99US-0128849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    82pp;
                                                                                                                                                                        195
                                                                                                                     98.9%;
                                                                                                                                                                      A; 240 C; 260 G; 210 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     clone DNA98853 cDNA complement
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3
                                                                                                      0;
                                                                                                     Score 593.4; DB 22
Pred. No. 5.5e-168;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ВP
                                                                                                                                   22; Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATCC
                                                                                                     Indels
                                                                                                                                      905;
                                                                                                   6;
                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ç
                                                                 60
                                 843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         for
                                                                                                   1;
```

```
RESULT 11
AAA47453
ID AAA47
XX AAA47
AC AAAA47
AC AAAA47
AC AAAA47
AC AAAA47
AC AAAA47
AC AAAA47
AC AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Дb
                                                                                                                                                                                                                                                                                                                                                                                                           TANGO: 128; 140; 197; 212; 213; 224; 239; modulating agent; asthma; graft versus-host diseases; rheumatoid arthritis; psoriasis; inflammatory bowel disease; septic shock; ulcerative colitis; Crohn's disease; chronic myelogenous leukemia; cancer; liver disease; Hodgkin's disease; osteoarthritis; Lyme's disease; cachexia; autoimmune disease; myasthemia gravis; autoimmune diabetes; systemic lupus erythematosus; transgenic animal; diagnosis;
                                                                                                      06-JUL-2000.
  30-DEC-1998;
                                                   23-DEC-1999;
                                                                                                                                                          WO200039284-A1
                                                                                                                                                                                                                                                                                                                                                                                        prognosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human TANGO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAA47453;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAA47453 standard; cDNA; 1550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGGCTGATAAAACAGCAAAGGAGGAATCTCTCTTCCCCGTGCCACCCAGCAAGGAGAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAGTTGAGCTTAGTGGAGGCAGATGCACCCACAGTGCCCCCTCAGGAGGCCACACTTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCTGTCTGTGGGGACTGTTTGCCCAGGTTCTACCGAAAGACACGCATTGGAGGCCTGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGTGCTGAGTCCCAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGTGCTGAGTCCCAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGGCTGATAAAACAGCAAAGGAGGAATCTCTCTTCCCCGTGCCACCCCAGCAAGGAGACC 594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAGTTGAGCTTAGTGGAGGCAGATGCACCCACAGTGCCCCCTCAGGAGGCCACACTTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GACCAAGAGTGCATCCCGTGCACGAAGCAGACCCCCACCTCTGAGGTTCAATGTGCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GACCAAGAGTGCATCCCGTGCACGAAGCAGACCCCCCACCTCTGAGGTTCAATGTGCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCTGTCTGTGGGGACTGTTTGCCCCAGGTTCTACCGAAAGACACGCATTGGAGGCCTGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGCATCACCTGTGCTGTCATCAATCGTGTTCAGAAGGTCAACTGCACAGCTACCTCTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGCATCACCTGTGCTGTCATCAATCGTGTTCAGAAGGTCAACTGCACAGCTACCTCTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCACTGGTGAGCCAGCCTAGTGGTGTTTACCCTGGCCTTCCTGGGGCCTCTTCTTCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGCACAGCCTGCCCTCGCAGGTACAAAAGCAGCTGGGGCCACCACAAATGTCAGAGT 180
                                                                                                                                                                                                                                                                                                                                                                                        prophylatic; therapeutic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        140-1 coding sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
  98US-0223546
                                                99WO-US31025
                                                                                                                                                                                                                                                         Location/Qualifiers 2..622
                                                                                                                                                                                                        /*tag= a
/product= TANGO 140-1
                                                                                                                                                                                                                                /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     611
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ВP.
                                                                                                                                                                                                                                                                                                                                                                                        human; ds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  783
```

```
Qy
                                                         밁
                                                                                    QУ
                                                                                                                     В
                                                                                                                                             Qy
                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                                                                                                                               DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                             δõ
                                                                                                                                                                                                                                           Вp
                                                                                                                                                                                                                                                                                                      Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δã
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       chronic myelogenous leukemia, cancer, liver disease, Hodgkin's disease, osteoarthritis, Lyme's disease, cochexia and autoimmune disease, cochexia and suroimmune disease, cachexia and suroimmune disease, cachexia and systemic lupus erythematosus. The nucleic acids are also useful for produci transgenic animals and the TANGO polypeptides themselves. Partial TANGO-128, 140, 197, 212, 213, 224, 239 sequences are useful in forensic biology, for diagnostic assays, prognostic assays, pharmacogenomics and for monitoring clinical trials. TANGO polypeptides are suitable for both prophylactic and therapeutic methods for treating a subject at risk of a disorder or having a disorder associated with aberrant TANGO expression. A wide range of cellular disorders can be treated.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Novel nucleic acid sequences encoding TANGO-128, 1 224 and 239 polypeptides useful for the treatment arthritis, psoriasis and autoimmune diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nucleic acids encoding TANGO polypeptides are useful as modulating agents for regulating cellular processes like asthma, graft versus-host diseases, rheumatoid arthritis, psoriasis, inflammatory bowel disease, septic shock, ulcerative collis, Crohn's disease,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (MILL-)
                                                          446
506
                            481
                                                                                       421
                                                                                                                     386
                                                                                                                                                  361
                                                                                                                                                                                    326
                                                                                                                                                                                                               301
                                                                                                                                                                                                                                             266
                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                        206
                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                   146
                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                 86
                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGTTGAGCTTAGTGGAGGCAGATGCACCCACACTGCCCCCCAGGAGGCCACACTTGTT
 TACTGCAAGCAGTTCTTCAACAGACATTGCCAGCGTGG
              TACTGCAAGCAGTTCTTCAACAGACATTGCCAGCGTGG
                                                                                                                                                                                               GACCAAGAGTGCATCCCGTGCACGAAGCAGACCCCCACCTCTGAGGTTCAATGTGCCTTC
                                                                                                                                                                                                                                                             GCTGTCTGTGGGGACTGTTTGCCCAGGTTCTACCGAAAGACACGCATTGGAGGCCTGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGTGGTCCTGGACAGGAGCTATCCAAGGATTGTGGTGATATGGAGAGGGTGGAGATGCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2000-465743/40
)B; AAB01420.
                                                                                       GCACTGGTGAGCCAGCCTAGTGGTGTTTACCCTGGCCTTCCTGGGGGCTCTTCTTCCTC
                                                                                                                                                                                  GACCAAGAGTGCATCCCGTGCACGAAGCAGACCCCCACCTCTGAGGTTCAATGTGCCTTC
                                                                                                                                                                                                                                                                                                      TGCATCACCTGTGCTGTCATCAATCGTGTTCAGAAGGTCAACTGCACAGCTACCTCTAAT
                                                                                                                                                                                                                                                                                                                                      TGCATCACCTGTGCTGTCATCAATCGTGTTCAGAAGGTCAACTGCACAGCTACCTCTAAT
                                                                                                                                                                                                                                                                                                                                                                    TGCACAGCCTGCCTCCTCGCAGGTACAAAAGCAGCTGGGGCCCACCAAATGTCAGAGT
                                                                                                                                                                                                                                                                                                                                                                                                 TGCACAGCCTGCCTCCTCGCAGGTACAAAAGCAGCTGGGGCCACCACAAATGTCAGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                 TGTGGTCCTGGACAGGAGCTATCCAAGGATTGTGGTTATGGAGAGGGTGGAGATGCCTAC
                                                                                                                                                                                                                                             GCTGTCTGTGGGGACTGTTTGCCCAGGTTCTACCGAAAGACACGCATTGGAGGCCTGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       al Similarity
518; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MILLENNIUM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1550 BP; 452 A; 329 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PHARM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  74.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 518;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               392 G; 377 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3.1e-145;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 21;
                              518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     140,
it of a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 1550;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       asthma, rheumatoid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     197, 212,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 producing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       213,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                       480
                                                                                                                                                  420
                                                                                                                                                                                                                                                                                                                                                                                                   180
                                                                                                                                                                                                                                                                                                                                                                                                                                 145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60
                                                                                                                                                                                                               360
                                                                                                                                                                                                                                                                           300
                                                                                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                                                                                   205
                                                                                                                                                                                  385
                                                                                                                                                                                                                                             325
                                                                                                                                                                                                                                                                                                        265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
```

```
RESULT 12
AAS05960
ID AAS05
                                                                                        DЬ
                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                            \begin{array}{l} \textbf{S} \times \textbf{C} \cap \textbf
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present sequence represents a degenerate cDNA sequence for human CC uterine myometrium leiomyoma receptor (MMLR) variant #1. UMLR is a novel CC member of the tumour necrosis factor receptor (TNFR) family. The UMLR (CC (also known as ztnfil)) gene maps to chromosome Xql1-ql2. Amino acid CC residues of UMLR involved in ligand binding, consisting of residues 1-X (C) (where X is 129-136) are useful for inhibiting the quantity of lung, CC breast carcinoma, melanoma, osteosarcoma or lymphoma cells expressing CC UMLR protein. UMLR polypeptides or its fragments are useful diagnostically or therapeutically for identifying tumour cells in uterus CC melanoma and lung cancer, for promoting wound healing, and for generating CC vaccines for cancer therapy. They are also useful for studying cell-cell cinteractions, apoptosis, fertilisation, development, immune recognition, CC growth control, tumour suppression and embryo maturation in vitro and in CC vivo, and for treating disorders associated with them. UMLR is also CC useful for identifying inhibitors of its activity, and for preparing CC antibodies which can be used to detect UMLR expression. UMLR
                                                                                                                                                                                                                                                                                               Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22-OCT-1999;
02-NOV-1999;
17-JUL-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Uterine myometrium leiomyoma receptor polypeptides and polynum for modulating inflammation, tumour growth, metastasis, cellumaturation, detecting modulators and as diagnostic indicators
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Xu W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; uterine myometrium leiomyoma receptor; UMLR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAS05960 standard; cDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 891
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2001-300488/31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-AUG-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         23-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             03-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO200130850-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  breast carcinoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         tumour necrosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Degenerate cDNA sequence for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         07-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAS05960;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               polynucleotide sequences are indicators of cancer and for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (ZYMO ) ZYMOGENETICS INC
                                                                                                                                                                                                                                                                                               Local Similarity
                                                                                        ш
                                                                                                                                                                        ب
                                                                                                                                                                        ATGGATTGCCAAGAAAATGAGTACTGGGACCAATGGGGACGGTGTGTCACCTGCCAACGG
                                                                                    TGTGGTCCTGGACAGGAGCTATCCAAGGATTGTGGTTATGGAGAGGGTGGAGATGCCTAC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 therapy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Lofton-Day C
DC, Yee DP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; 99US-0160880.
; 99US-0163215.
; 2000US-0218769.
; 2000US-0222221.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Page 133; 148pp; English.
                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                           вP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2000WO-US29304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         factor receptor;
                                                                                                                                                                                                                                                                                                                                                                                                                                141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         uterus melanoma; osteosarcoma; lymphoma; wound
                                                                                                                                                                                                                                                                                               64.48;
58.68;
                                                                                                                                                                                                                                                                                                                                                                                                                           A; 105 C; 150 G; 112 T; 383 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Henne
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             891
                                                                                                                                                                                                                                                       147;
                                                                                                                                                                                                                                                                                                                                       Score 446.6;
                                                                                                                                                                                                                                                                                               Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          70,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                useful as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          human
                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Presnell SR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TNFR; chromosome Xq11-q12; lung
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          UMLR variant
                                                                                                                                                                                                                                                            6.7e-124;
.ches 107;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              probes
                                                                                                                                                                                                                                                                                                                                                DB
                                                                                                                                                                                                                                                                                                                                                22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       or primers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Yao
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          #1
                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                       Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ztnfr11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           polynucleotides
, cellular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Novak JE;
                                                                                                                                                                                                                                                                                                                                                    891;
                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                diagnostic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        of cancer
                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cancer;
healing;
                                                                                            60
                                                                                                                                                                            60
                                                                                                                                                                                                                                                                0;
```

Qy

61

```
ARSULT 13
AASO5945
ID AASO5
XX ASO5
XX ASO5
XX Human
XX Human
XX Human
XX Human
XX Homo
XX Homo
XX Oreas
XX ORE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               멅
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Дd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                        22-OCT-1999;
02-NOV-1999;
17-JUL-2000;
01-AUG-2000;
                                                                                                                                                                                                                                                                                                                                                                                                             Human; uterine myometrium leiomyoma receptor; UMLR; ztnfr11; tumour necrosis factor receptor; TNFR; chromosome xq11-q12; lung breast carcinoma; uterus melanoma; osteosarcoma; lymphoma; wound
                                                                                                                                                                                                                              23-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human uterine myometrium leiomyoma receptor (UMLR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                07-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAS05945
                                                                                   (ZYMO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                         ξ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GARWSNCARGINWS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAGTCCCAAGTCTC 614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAYAARACNGCNAARGARGARWSNYTNTTYCCNGTNCCNCCNWSNAARGARACNWSNGCN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GATAAAACAGCAAAGGAGGAATCTCTCTTCCCCGTGCCACCCAGCAAGGAGACCAGTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TAYTGYAARCARTTYTTYAAYMGNCAYTGYCARMGNGGNGGNYTNYTNCARTTYGARGCN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAYCARGARTGYATHCCNTGYACNAARCARACNCCNACNWSNGARGTNCARTGYGCNTTY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GACCAAGAGTGCATCCCGTGCACGAAGCAGACCCCCCACCTCTGAGGTTCAATGTGCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCTGTCTGTGGGGACTGTTTGCCCAGGTTCTACCGAAAGACACGCATTGGAGGCCTGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGCACAGCCTGCCCTCGCAGGTACAAAAGCAGCTGGGGCCACCACAAATGTCAGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGYACNGCNTGYCCNCCNMGNMGNTAYAARWSNWSNTGGGGNCAYCAYAARTGYCARWSN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                       Lofton-Day CE,
                                                                                ZYMOGENETICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      standard;
                                                                                                                      990S-0160880.
990S-0163215.
20000S-0218769.
20000S-0222221.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                 2000WO-US29304
                                                                                                                                                                                                                                                                                                                                                                                                  ss.
                   DP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            614
                                       Henne
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      807
                                       æ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ВP
                                       Presnell
                                       SR,
                                     Yao
                                     ĸ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                degenerate
                                     Novak
                                     JE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         300
```

```
XXCCCCCCCCCCCCCCXXX711111XX
                                                                                                                                                                             Uterine myometrium leiomyoma receptor polypeptides and polynucleotides for modulating inflammation, tumour growth, metastasis, cellular maturation, detecting modulators and as diagnostic indicators of cance
                                                                                                                                                                              of cancer
```

2001-300488/31.

Disclosure; Page 117-118; 148pp; English

diagnostically or therapeutically for identifying tumour cells in uterus melanoma and lung cancer, for promoting wound healing, and for generating vaccines for cancer therapy. They are also useful for studying cell-cell interactions, apoptosis, fertilisation, development, immune recognition, growth control, tumour suppression and embryo maturation in vitro and in vivo, and for treating disorders associated with them. UMLR is also useful for identifying inhibitors of its activity, and for preparing antibodies which can be used to detect UMLR expression. UMLR polynucleotide sequences are useful as probes or primers as diagnostic indicators of cancer and for gene therapy. The present sequence represents a degenerate sequence encoding for a novel human uterine myometrium leiomyoma receptor (UMLR) which is a member of the tumour necrosis factor receptor (TNFR) family. The UMLR (also known as ztnfrll) gene maps to chromosome Xqll-ql2. Amino acid residues of UMLR involved in ligand binding, consisting of residues 1-X (where X is 129-136) are useful for inhibiting the quantity of lung, breast carcinoma, melanoma, osteosarcoma or lymphoma cells expressing UMLR protein. UMLR polypeptides or its fragments are useful

Sequence 807 BP; 125 A; 93 C; 142 G; 102 T; 345 other;

Query Match Best Local S Matches 370 Similarity Conservative 64.4%; Score 446.4; DB 22; 55.4%; Pred. No. 7.3e-124; 156; Mismatches Length 0; Gaps 60 0;

B Ω В δõ 61 61 120 60

121 121 TGCACAGCCTGCCCTCCTCGCAGGTACAAAAGCAGCTGGGGCCCACCACAAATGTCAGAGT TGYACNGCNTGYCCNCCNMGNMGNTAYAARWSNWSNTGGGGNCAYCAYAARTGYCARWSN

181 181 TGYATHACNTGYGCNGTNATHAAYMGNGTNCARAARGTNAAYTGYACNGCNACNWSNAAY TGCATCACCTGTGCTGTCATCAATCGTGTTCAGAAGGTCAACTGCACAGCTACCTCTAAT

240

241

301 301 GACCAAGAGTGCATCCCGTGCACGAAGCAGACCCCCCACCTCTGAGGTTCAATGTGCCTTC GAYCARGARTGYATHCCNTGYACNAARCARACNCCNACNWSNGARGTNCARTGYGCNTTY

360 300

360

361 420

Qy

Q DЬ

Ъ Ş Дb δõ 뫄 Š

241

420

421 480

밁

δÃ 밁 Qγ TACTGCAAGCAGTTCTTCAACAGACATTGCCAGCGTGGAGGTTTGCTGCAGGTTTGAGGCT
||:||:||:||:||:||:||:||
TAYTGYAARCARTTYTTYAAYMGNCAYTGYCARMGNGGNGGNYTNYTNCARTTYGARGCN

```
RESULT 14
AAA47454
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δÃ
      diseases e.g. myasthemia gravis, autoimmune diabetes and systemic lupus erythematosus. The nucleic acids are also useful for product transgenic animals and the TANGO polypeptides themselves. Partial TANGO-128, 140, 197, 212, 213, 224, 239 sequences are useful in forensic biology, for diagnostic assays, prognostic assays, pharmacogenomics and for monitoring clinical trials. TANGO polypeptides are suitable for both prophylactic and therapeutic methods for treating a subject at risk of a disorder or having a disorder associated with aberrant TANGO expression. A wide range of cellular disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TANGO; 128; 140; 197; 212; 213; 224; 239; modulating agent; asthma; graft versus-host diseases; rheumatoid arthritis; psoriasis; inflammatory bowel disease; septic shock; ulcerative colitis; Crohn's disease; chronic myelogenous leukemia; cancer; liver disease; Hodgkin's disease; osteoarthritis; lyme's disease; eachexia; autoimmune disease; myasthemia gravis; autoimmune diabetes systemic lupus erythematosus; transgenic animal; diagnosis; prophylatic; therapeutic; human; ds.
                                                                                                                                                                          Nucleic acids encoding TANGO polypeptides are useful as modulating agents for regulating cellular processes like asthma, graft versus-host diseases, rheumatoid arthritis, psoriasis, inflammatory bowel disease, septic shock, ulcerative colitis, Crohn's disease, chronic myelogenous leukemia, cancer, liver disease, Hodgkin's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo
                                                                                                                                                            disease,
                                                                                                                                                                                                                                                                                                           arthritis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAA47454 standard;
                                                                                                                                                                                                                                                                             Claim 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         (MILL-) MILLENNIUM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-DEC-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           23-DEC-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO200039284-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               601
                                                                                                                                                                                                                                                                                                                           and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAYWSNCC 668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCTATACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GARWSNCARGARWSNTTYACNATGGCNWSNTGYACNWSNGARWSNCAYWSNCAYTGGGTN 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAGTCCCAAGTCTCTTGGGCCCCTGGCAGCCTTGCCCAGTTGTTCTCTCTGGACTCTGTT
                                                                                                                                                                                                                                                                                                                                                                          2000-465743/40
DB; AAB01421.
                                                                                                                                                                                                                                                                                                        nucleic acid sequences encoding TANGO-128, 140, nd 239 polypeptides useful for the treatment of itis, psoriasis and autoimmune diseases
                                                                                                                                           osteoarthritis, Lyme's disease, cachexia and autoimmune e.g. myasthemia gravis, autoimmune diabetes and systemi
                                                                                                                                                                                                                                                                             Fig 3;
disorders can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           98US-0223546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99WO-US31025
                                                                                                                                                                                                                                                                           209pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
1..594
/*tag= a
/product= TANGO 140-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   coding sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cDNA; 3385
                                                                                                                                                                                                                                                                                                                                                                                                                                                            PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ВP
                                                                                                                                                                                                                                                                                                                           asthma, rheumatoid
                                                                                                                                                                                                                                                                                                                                             212,
                                                                                                                               producing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        diabetes;
```

```
RESULT 15
AAS05973
                                                                                                                                                                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                               B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Вр
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QУ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SQ
밁
                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                       22-OCT-1999;
02-NOV-1999;
17-JUL-2000;
01-AUG-2000;
                                                                                                                                                    Synthetic.
                                                                                                                                                                Chimeric -
Chimeric -
                                                                                                                                                                                                        tumour necrosis factor receptor; TNFR; chromosome Xq11-q12; lung breast carcinoma; uterus melanoma; osteosarcoma; lymphoma; wound
                                                                                                                                                                                                                                               Expression vector pZP7Z insert sequence containing ztnfr11/TNFR1 chimera
                                                                                                                                                                                                                                                                                                             AAS05973 standard; DNA; 1081 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 3385
ŭ
                  (ZYMO ) ZYMOGENETICS
                                                                                                              03-MAY-2001.
                                                                                                                                  WO200130850-A1
                                                                                                                                                                                              gene
                                                                                                                                                                                                                         Mouse; uterine myometrium leiomyoma receptor; UMLR;
                                                                                                                                                                                                                                                                      07-SEP-2001
                                                                                          23-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                487
                                                                                                                                                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                                                                                                                                        427
                                                                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                                                                                               367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         67
Σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 ATGGATTGCCAAGAAATGAGTACTGGGACCAATGGGGACGGTGTGTCACCTGCCAACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGCATCACCTGTGCTGTCATCAATCGTGTTCAGAAGGTCAACTGCACAGCTACCTCTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                  CAGTTGAGCTTAGTGGAGGCAGATGCACCCACAGTGCCCCCTCAGGAGGCCACACTTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCTGTCTGTGGGGACTGTTTGCCCAGGTTCTACCGAAAGACACGCATTGGAGGCCTGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGCACAGCCTGCCCTCGCAGGTACAAAAGCAGCTGGGGCCACCACAATGTCAGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGCACAGCCTGCCTCCTCGCAGGTACAAAAGCAGCTGGGGCCACCACAAATGTCAGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGTGGTCCTGGACAGGAGCTATCCAAGGATTGTGGTTATGGAGAGGGTGGAGATGCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATGGATTGCCAAGAAAATGAGTACTGGGGACCAATGGGGACGGTGTGTCACCTGCCAACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                428;
                                                                                                                                                                                                                                                                                                                                                                                     GCACTGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                GACCAAGAGTGCATCCCGTGCACGAAGCAGACCCCCACCTCTGAGGTTCAATGTGCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                          GACCAAGAGTGCATCCCGTGCACGAAGCAGACCCCCCACCTCTGAGGTTCAATGTGCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCTGTCTGTGGGGACTGTTTGCCCCAGGTTCTACCGAAAGACACGCATTGGAGGCCTGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGTGGTCCTGGACAGGAGCTATCCAAGGATTGTGGTTATGGAGAGGGTGGAGATGCCTAC
                                                                                                                                                                                             therapy; human; mutant;
                                                                                                                                                                                                                                                                                                                                                                                                       CAGTTGAGCTTAGTGGAGGCAGATGCACCCACAGTGCCCCCTCAGGAGGCCACACTTGTT
                                                                                                                                                                                                                                                                                                                                                                GCACTGTTG
Lofton-Day
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                          Mus
                                                                                                                                                                Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                           2000WO-US29304
                                                                                                                                                                                                                                                                     (first entry)
                                       2000US-0218769
2000US-0222221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP;
                                                                                                                                                                                                                                                                                                                                                                                     429
                                                                                                                                                                                                                                                                                                                                                                 495
                                                           99US-0160880
99US-0163215
                                                                                                                                                                sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         915
CE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61.7%;
99.8%;
                    INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Α;
Henne
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        801 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                              ds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 427.4; DB Pred. No. 7e-118;
Ŗ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         718
Presnell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ₽,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
  Yao
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
  ۲
                                                                                                                                                                                                                              ztnfr11;
 Novak JE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                          healing
                                                                                                                                                                                                                     cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60
                                                                                                                                                                                                                                                                                                                                                                                                          486
                                                                                                                                                                                                                                                                                                                                                                                                                             420
                                                                                                                                                                                                                                                                                                                                                                                                                                                 426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
```

Foster DC,

Yee DP;

```
Ş
                                                                                         В
                                                                                                                            Ş
                                                                                                                                                                                                            Š
                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                               δð
                                                                                                                                                                                                                                                                                                                                          Ъ
                                                                                                                                                                                                                                                                                                                                                                             δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
        밁
                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CC The present sequence for expression vector p2P7z insert sequence CC contains the sequence for a zthfr1/TWRR1 chimera and the K2159/mII4 CC reporter gene sequence. Human zthfr11 or UMLR (uterine myometrium CC leiomyoma receptor is a novel member of the tumour necrosis factor CC receptor (TNFR) family. The UMLR (also known as zthfr11) gene maps CC to chromosome Xq11-q12. Amino acid residues of UMLR involved in ligand CC binding, consisting of residues 1-X (where X is 129-136) are useful for CC inhibiting the quantity of lung, breast carcinoma, melanoma, osteosarcoma CC or lymphoma cells expressing UMLR prottein. UMLR polypeptides or its CT fragments are useful diagnostically or therapeutically for identifying CC tumour cells in uterus melanoma and lung cancer, for promoting wound CC melaling, and for generating vaccines for cancer therapy. They are also useful for studying cell-cell interactions, apoptosis, fertilisation, CC embryo maturation in vitro and in vivo, and for treating disorders associated with them. UMLR is also useful for identifying inhibitors of CC unlar expression. UMLR polynucleotide sequences are useful as probes or riving a attended to inview and for preparing antibodies which can be used to detect CC UMLR expression. UMLR polynucleotide sequences are useful as probes or riving a second to inview and for preparing intibodies which can be used to detect the procession. UMLR polynucleotide sequences are useful as probes or primare as diagnostic indicators of formers and for members.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches 415; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    primers as diagnostic indicators of cancer and for gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 1081 BP; 248 A; 311 C; 306 G; 216 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Uterine myometrium leiomyoma receptor polypeptides and polynucleotides for modulating inflammation, tumour growth, metastasis, cellular maturation, detecting modulators and as diagnostic indicators of cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 14; Page 143-144; 148pp; English.
                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                            61 TGTGGTCCTGGACAGGAGCTATCCAAGGATTGTGGTTATGGAGAGGGGTGGAGATGCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GACCAAGAGTGCATCCCGTGCACGAAGCAGACCCCCACCTCTGAGGTTCAATGTGCCTTC
                                                                                                                                                                                             GCTGTCTGTGGGGACTGTTTTGCCCCAGGTTCTACCGAAAGACACGCATTGGAGGCCTGCAG
                                                                                                                                                                                                                                                                           TGCATCACCTGTGCTGTCATCATCGTGTTCAGAAGGTCAACTGCACAGCTACCTCTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                         TGTGGTCCTGGACAGGAGCTATCCAAGGATTGTGGTTATGGAGAGGGTGGAGATGCCTAC
                                                                                                                                                                     GCTGTCTGTGGGGACTGTTTGCCCCAGGTTCTACCGAAAGACACGCATTGGAGGCCTGCAG
                                                                                                                                                                                                                                                     TGCATCACCTGTGCTGTCATCAATCGTGTTCAGAAGGTCAACTGCACAGCTACCTCTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               59.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 413.2; DB 22; Length 1081; Pred. No. 7.8e-114; 0; Mismatches 3; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                     300
                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
```

Search completed: October 27, Job time: 250 secs

2002, 01:37:17

THIS PAGE BLANK (USPTO)